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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,092	08/19/2003	Bruce Thomson	571-883	3072
1059	7590	06/15/2006	EXAMINER	
BERESKIN AND PARR 40 KING STREET WEST BOX 401 TORONTO, ON M5H 3Y2 CANADA			NGUYEN, KIET TUAN	
			ART UNIT	PAPER NUMBER
			2881	

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

2.0

Office Action Summary	Application No. 10/643,092	Applicant(s) THOMSON ET AL.	
	Examiner Kiet T. Nguyen	Art Unit 2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/17/04</u> . | 6) <input type="checkbox"/> Other: ____. |

Rejection Under 35 U.S.C. 102(b)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7, 10-13, 15-16 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Thomson et al. (5,847,386).

Thomson et al. (5,847,386) discloses, in figs. 1-40, a mass spectrometer apparatus. The apparatus includes a mass analyzer including a quadrupole having a rod with an opening slot 200, positioned along an axis, defined an inscribed circle having the different radius at the first end and the second end (see figs. 2 and 6), and applied a RF voltage (see col. 2, lines 4-6); DC offset voltages applied to a set of elongated rods (see fig. 3 and col. 14, lines 61-65); the rods 232 displaced from an exact quadrupole for generating the higher order components; means for storing ions for pulse injection into the mass analyzer (see col. 12, lines 25-32); a collision cell 42; an ion source 16; and means for transmitting and admitting ions to the rod set (see fig. 1); and a detector 56.

Rejection Under 35 U.S.C. 103(a)

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 6, 8-9, 14 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomson et al. (5,847,386).

Thomson et al. (5,847,386) disclose all the features as discussed above except an array detector or two array detectors for detecting ions as recited in claim 6 or 9; a supplementary AC voltage applied to one of the pair of rods as recited in claim 8; an ion mobility device as recited in claims 14 and 17-18.

Using the array detector or two array detectors for detecting ions is considered to be obvious variation in design, since it well known in the art to use the array detector or two array detectors for detecting the ions in the mass spectrometer, thus would have been obvious to one skilled in the art to use the array detector or two array detectors in the Thomson et al. (5,847,386) apparatus for analyzing the ions.

Applying the supplementary AC voltage to one of the pair of rods is considered to be obvious variation in design, since it well known in the art to apply the supplementary AC voltage to the pair of rod set (see Bier et al. 5,420,425), thus would have been

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obvious to one skilled in the art to apply the supplementary AC voltage to the rods in the Thomson et al. (5,847,386) apparatus for analyzing the ions.

Using the ion mobility device is considered to be obvious variation in design, since it well known in the art to use the ion mobility device in combination with an ion guide in the mass spectrometer (see Loboda 6,744,043), thus would have been obvious to one skilled in the art to use the ion mobility device in the Thomson et al. (5,847,386) apparatus for analyzing the ions.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- 1) Javahery et al. (6,093,929) discloses a tandem mass spectrometer; and
- 2) Loboda (6,744,043) discloses using an ion mobility device in combination with an ion guide in the mass spectrometer.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiet T. Nguyen whose telephone number is 571-272-2479. The examiner can normally be reached on Monday-Friday 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on 571-272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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KIET T. NGUYEN
PRIMARY EXAMINER